

PATENT COOPERATION TREATY

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REC'D 30 MAR 2004

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/NO 2003/000015	International filing date (day/month/year) 17.01.2003	Priority date (day/month/year) 18.01.2002
International Patent Classification (IPC) or national classification and IPC B65D 47/08, B65D 47/10		
Applicant MYHRE, Svein		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☒ (sent to the applicant and to the International Bureau) a total of 5 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand 12.08.2003	Date of completion of this report 22.03.2004
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NO 2003/000015

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☒ This report is based on a translation from the original language into the following language english, which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1(b))
 - ☒ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
 - ☐ the international application as originally filed/furnished
 - ☒ the description:
 - pages 1-9 as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☒ the claims:
 - pages _____ as originally filed/furnished
 - pages* _____ as amended (together with any statement) under Article 19
 - pages* 1-5 received by this Authority on 12.02.2004
 - pages* _____ received by this Authority on _____
 - ☒ the drawings:
 - pages 1-6 as originally filed/furnished
 - pages* _____ received by this Authority on _____
 - pages* _____ received by this Authority on _____
 - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ the description, pages _____
 - ☐ the claims, Nos. _____
 - ☐ the drawings, sheets/figs _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to the sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - ☐ the description, pages _____
 - ☐ the claims, Nos. _____
 - ☐ the drawings, sheets/figs _____
 - ☐ the sequence listing (*specify*): _____
 - ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NO 2003/000015

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-29</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-29</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-29</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

This report has been based on the amended claims 1-29 filed 2004-02-12.

The following documents were cited in the International Search Report:

D1: DE 4338090 A1

D2: WO 0044638 A1

The invention refers to a method for providing an injection moulded hinged guarantee closure for a container moulded in the closed state. The invention also refers to a method for providing a hinged guarantee closure on a container opening and to a hinged guarantee closure for an opening in a container and to a container having a hinged guarantee closure for an opening in said container.

D1 refers to a closure stopper for a container. The stopper has a wall (31) which encompasses the container rim (2) and a securing ring which is connected to said wall by means of webs.

D2 describes a hinged guarantee closure for a container the closure is injection moulded in the closed state. The closure comprises a cap (22) with an integral closing member (53) intended to cooperate with the cylinder formed member (51). The closure further comprises a ring member (21) for connecting the closure to a container (fig 4, page 12 lines 1-9). The cap and the ring member are connected by hinge element (23.1) and (23.2). The cap and the ring member are axially spaced apart by gaps (33-38). In the gap (33) there are guarantee members (39) which connect the cap and the ring member (figure 3, page 10-11, lines 18-8).

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: V.

The closure is further provided with a snap edge (57) and means for attaching the closure on a container (figure 4). Figure 4 also shows that the container is provided with a coupling part.

The documents cited in the International Search Report represent the background art.

The invention defined in claims 1-29 is not disclosed by any of these documents.

None of the cited documents give any indication towards the claimed: method for providing a hinged guarantee closure, method for providing a hinged guarantee closure on a container opening, hinged guarantee closure for an opening in an container, container having a hinged guarantee closure for an opening. No relevant combination of the cited documents would lead a person skilled in the art to the invention defined in the claims.

Therefore, the invention defined in claims 1-29 is novel and is considered to involve an inventive step. It is also considered to be industrially applicable.

A m e n d e d c l a i m s

1.
5 A method for providing a hinged guarantee closure for a container, said closure comprising a cap (11; 22; 38) having an integral closing member (12; 23) for closing cooperation with an opening in said container, and a ring member (13; 24; 39) for connection to said container around said opening, characterised in that the guarantee closure is injection moulded and formed in the closed state, i.e., with a guarantee seal,
10 the closure being injection moulded in such a form that the moulded closure will comprise said cap (11; 22; 38) and said ring member (13; 24; 39) connected by a hinge element (15; 26) and at least one guarantee connection (16; 27; 40), but otherwise axially spaced (21; 32); the hinge element is made in the periphery of the cap.
- 15 2.
The method of claim 1, characterised in that the ring member (13; 24; 39) is injection moulded with a coupling part (14; 25) intended for cooperation with a coupling part on the container.
- 20 3.
The method of claim 2, characterised in that the ring member (13; 24; 39) is injection moulded having an internal circumferential snap edge (14; 25).
4.
25 The method of either one of the preceding claims, characterised in that said guarantee connection (16; 27; 40) is generally formed flush with the cap and ring member exterior surfaces.
5.
30 The method of either one of the preceding claims, characterised in that the guarantee connection (40) is made so that it is clear whether the guarantee connection (40) has been broken or not.

6.

A method for providing a hinged guarantee closure on a container opening, said closure comprising a cap (11; 22; 38) having an integral closing member (12; 23) for closing cooperation with the container opening (19; 30),

- 5 characterised in that the closure is injection moulded in the closed state, i.e., with a guarantee seal, the closure being injection moulded in such a form that the moulded closure will comprise the cap (11; 22; 38) with the integral closing member (12; 23) and a ring member (13; 24; 39), hinge-connected (15; 26) and guarantee-connected (16; 27; 40) to the cap (11; 22), but otherwise axially spaced (21; 32) relative to the cap (11; 22),
10 the hinge (15; 26) is made in the periphery of the cap, and the closure is made having a coupling part (14; 25), and the container (17; 28) is provided with a coupling part (20; 31) that cooperates therewith.

7.

- 15 The method of claim 6, characterised in that the ring member (13; 24; 39) is made having an internal circumferential snap edge (14; 25), that the container (17; 28) is provided with a circumferential groove (20; 31) around the opening, adapted to the said snap edge, and that the moulded closure is pressed with its ring member (13; 24) onto the container (17; 28) so that the snap edge (14; 25) is pressed to snap into the
20 circumferential groove (20; 31).

8.

The method of claim 6 or 7, characterised in that the guarantee connection (40) is made so that it is clear whether the guarantee connection (40) has been broken or not.

25

9.

The method of either one of claims 6 to 8, characterised in that the guarantee connection (16; 27; 40) is generally formed flush with the cap and ring member exterior surfaces.

30

10.

The method of either one of the preceding claims, characterised in that the hinge (26) is made in a radially indented portion (36) of the cap (22).

35 11.

The method of claim 9, characterised in that the indented portion (36) is shaped so as to be outwardly concave.

12.

A hinged guarantee closure for an opening in a container, said closure comprising a cap (11; 22; 38) having an integral closing member (12; 23) for cooperation with said opening, and a ring member (13; 24; 39) for connection to the container around said opening, characterised by:
said cap and ring member being connected by a hinge element (15; 26) and at least one guarantee connection (16; 27; 40); the hinge element (15; 26) is formed in the periphery of the cap; and said ring member is otherwise being axially spaced (21; 32) relative to said cap.

13.

The hinged guarantee closure of claim 12, characterised by said guarantee connection being positioned substantially diametrical of said respective hinge element.

14.

The hinged guarantee closure of claim 12, characterised by said cap and ring member generally having similar external diameters.

15.

The hinged guarantee closure of claim 12, characterised in that said hinge element comprises a spring structure, whereby the cap is biased in either one of an open position or closed position relative to said ring member.

16.

The hinged guarantee closure of claim 12, characterised by a coupling part (14; 25) on the ring member (13; 24; 39).

17.

The hinged guarantee closure of claim 16, characterised in that the coupling part on the ring member is an internal circumferential snap edge (14; 25).

18.

The hinged guarantee closure of claims 12 to 17, characterised in that the guarantee connection (16; 27; 40) is generally formed flush with the cap and ring member exterior surfaces

19.

The hinged guarantee closure of claims 12 to 18, characterised in that the guarantee connection (16; 27; 40) is formed in the periphery of the cap and ring member.

5 20.

The hinged guarantee closure of claims 12 to 19, characterised in that the hinge (26) is arranged in a radially indented portion (36) of the cap wall.

21.

10 The hinged guarantee closure of claim 20, characterised in that the hinge (26) is curved concavely.

22.

15 The hinged guarantee closure of claims 12 to 21, characterised in that the guarantee connection (40) is formed so that it is clear whether it has been broken or not.

23.

20 A container having a hinged guarantee closure for an opening in said container, said closure comprising a cap (11; 22; 38) having an integral closing member (12; 23) for cooperation with said opening, and a ring member (13; 24; 39) for connection to the container around said opening, c h a r a c t e r i s e d by:
said guarantee closure being injection moulded and formed in the closed state, i.e., with a guarantee seal; said cap and ring member being connected by a hinge element (15; 26) and at least one guarantee connection (16; 27; 40); the hinge element (15; 26) is made in
25 the periphery of the cap; said ring member otherwise being axially spaced (21; 32) relative to said cap and having a coupling part (14; 25); and said container being provided with a coupling part (20; 31) for cooperation with said ring member coupling part (14; 25).

30 24.

The container of claim 23, c h a r a c t e r i s e d in that the coupling part on the ring member is an internal circumferential snap edge (14; 25), and that the container has a groove (20; 31) running around the opening (19; 30) into which the snap edge (14; 25) is snapped.

35

25.

The container of claims 23 or 24, characterised in that said guarantee connection is generally formed flush with the cap and ring member exterior surfaces

5

26.

The container of claim 23 to 25, characterised in that the guarantee connection (40) is formed so that it is clear whether it has been broken or not.

10 27.

The container of claim 23 to 26, characterised in that the hinge (26)) is arranged in a radially indented portion (36) of the cap.

28.

15 The container of claim 27, characterised in that the hinge (26) is curved with outward concavity.

29.

20 The container of claim 23, characterised by said cap, ring member, and container generally having similar external diameters.